What is claimed is:

1. A charged-particle beam irradiator for allowing a scan electromagnet provided on an entrance side of a final deflection electromagnet to scan a charged-particle beam to expand an irradiation field, said charged-particle beam irradiator, comprising:

a plurality of said scan electromagnets, wherein

kicks provided by the plurality of said scan electromagnets are superimposed to form a collimated irradiation field at an exit of said final deflection electromagnet.

2. A charged-particle beam irradiator according to claim 1, wherein said plurality of scan electromagnets are arranged according to following equation.

$$a_{11}(s_1) \cdot X_1' + a_{11}(s_2) \cdot X_2' + \cdots + a_{11}(s_n) \cdot X_n' = 0$$

where, n:number of the electromagnets.
$s_1 \cdots s_n$: distance from each electromagnet to beam irradiated position
$a_{11}(s)$: coefficient of beam transport matrix
X′: beam divergence at the beam irradiated position

3. A charged-particle beam irradiator according to claim 1 or 2, wherein said plurality of scan electromagnets are interposed between said final deflection electromagnet and a deflection electromagnet disposed on an entrance thereof.

4. A charged-particle beam irradiator according to claim 3, wherein said plurality of scan electromagnets are disposed

upstream from said deflection electromagnet at an entrance thereof.

5. A charged-particle beam irradiator according to claim 1 or 2, wherein said plurality of scan electromagnets are disposed independent of each other in X and Y directions.

Sub A1

6. A therapy system, comprising:

a charged-particle beam irradiator, having a plurality of scan electromagnets, configured such that kicks provided by the plurality of said scan electromagnets are superimposed to form a collimated irradiation field at an exit of a final deflection electromagnet to irradiate an affected part with a charged-particle beam.